



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Geoffrey Terence Bailey Date: ~~October 30, 2003~~  
Serial No. : 10/654,374  
Filed : September 3, 2003  
For : METHOD OF DISPLAYING GRAPHICS ON A CONTAINER

PETITION FOR GRANT OF PRIORITY UNDER 35 U.S.C. 119

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

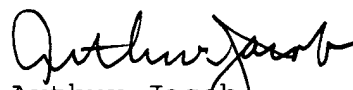
Applicant hereby petitions for grant of priority of the present application on the basis of the following prior filed foreign application:

<u>COUNTRY</u>	<u>SERIAL NO.</u>	<u>FILING DATE</u>
United Kingdom	03 12 570.5	June 2, 2003

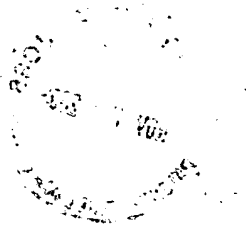
To perfect Applicant's claim to priority, a certified copy of the above listed prior filed application is enclosed.

Acknowledgment of Applicant's perfection of claim to Priority is accordingly requested.

Respectfully submitted,

  
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CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 ON

OCTOBER 30, 2003

DATE

ARTHUR JACOB

NAME OF REGISTERED REPRESENTATIVE

Arthur Jacob

SIGNATURE

10/30/03

DATE





INVESTOR IN PEOPLE

The Patent Office  
Concept House  
Cardiff Road  
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I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

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Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.

Signed

*Stephen Hordley*

Dated

15 September 2003

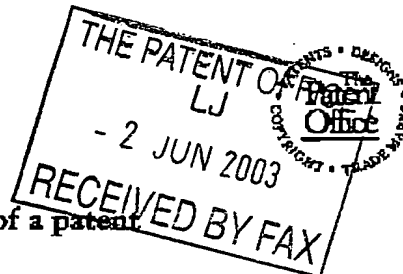


02JUN03 E811763-1 003028  
P01/7700 0.00-0312570.5Effective  
Form

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Patents Form 1/77

Patents Act 1977

Request for grant of a patent  
GrantThe Patent Office  
Concept House  
Cardiff Road  
Newport  
Gwent NP10 8QQ

1. Your reference

2072-P101-GB

2. Patent application number

0312570.5

02 JUN 2003

3. Full name, address and postcode of the or of  
each applicant (*underline all surnames*)ORB PACKAGING UK LIMITED  
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United KingdomPatents ADP number (*if you know it*) 8643462001If the applicant is a corporate body, give the  
country/state of its incorporation

United Kingdom

4. Title of the invention

Container

5. Name of your agent

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0114 275 2400

Patents ADP number

7807049001

- |  | Country                       | Priority application number<br>(if you know it) | Date of filing<br>(day/month/year) |
|--|-------------------------------|---|------------------------------------|
| 6. If you are declaring priority from one or more<br>earlier patent applications, give the country<br>and the date of filing of the or of each of<br>these earlier applications and ( <i>if you know<br/>it</i> ) the or each application number | N/A                           | N/A   | N/A                                |
| 7. If this application is divided or otherwise<br>derived from an earlier UK application,<br>give the number and the filing date of<br>the earlier application   | Number of earlier application |   | Date of filing<br>(day/month/year) |
|  | N/A                           |   | N/A                                |
| 8. Is a statement of inventorship and of right<br>to grant of a patent required in support of<br>this request?   | Yes                           |   |                                    |

Patents Form 1/77

## Patents Form 1/77

9. Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

Description

06

Claim(s)

02

Abstract

00

Drawings

04

10. If you are also filing any of the following, state how many against each item.

Priority documents

None

Translations of priority documents

N/A

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

None

Request for preliminary examination and search (Patents Form 9/77)

None

Request for substantive examination (Patents Form 10/77)

None

Any other documents (Please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature

Date Monday, 02 June 2003

12. Name and daytime telephone number of person to contact in the United Kingdom

RALPH ATKINSON CPA  
0114 275 2400



**DUPLICATE**

1

## **Container**

### **Background of the Invention**

#### **1. Field of the Invention**

5           The present invention relates to the display of graphics on a container, in particular a container having a non-uniform conformation.

#### **2. Description of the Related Art**

10           A first technique for displaying 2-Dimensional graphics on a 3-Dimensional container is to apply the graphics to the container by printing the graphics directly onto a surface of the container.

          A second technique for displaying 2-Dimensional graphics on a 3-Dimensional container is to apply the graphics onto a label which is then secured onto a surface of the container, or secured around a conformation  
15           portion of the container having a uniform cross-section therethrough.

### **Brief Summary of the Invention**

          According to a first aspect of the present invention, there is provided a planar covering for a container comprising a conformation portion having a  
20           non-uniform cross-section therethrough, said planar covering comprising graphic representation in distorted proportion to compensate for the shape of said conformation portion, whereby said graphic representation appears in normal proportion following application of said planar covering to said conformation portion.

According to a second aspect of the present invention, there is provided a container comprising a conformation portion having a non-uniform cross-section therethrough, and a planar covering for said container, said planar covering comprising graphic representation in distorted proportion  
5 to compensate for the shape of said conformation portion, whereby said graphic representation appears in normal proportion following application of said covering to said conformation portion.

According to a third aspect of the present invention, there is provided a method of applying graphics to a conformation portion of a container, said conformation portion having a non-uniform cross-section therethrough, said  
10 method comprising the steps of: a) applying graphics in distorted proportion to a planar covering, and b) performing an application process in which said planar covering is applied to said conformation portion such that following said application process said graphics appear in normal proportion.

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#### **Brief Description of the Several Views of the Drawings**

*Figure 1* shows a container having a non-uniform conformation portion;

*Figure 2* shows a planar covering for application to the container  
20 shown in *Figure 1*;

*Figure 3* shows graphics of the planar covering shown in *Figure 2* in further detail;

*Figure 4* shows the planar covering shown in *Figure 2* applied to the container shown in *Figure 1*.

## **Written Description of the Best Mode for Carrying Out the Invention**

### ***Figure 1***

*Figure 1* shows a container comprising a conformation portion having  
5 a non-uniform cross-section therethrough. In this example, the container is a  
bottle **101**. Bottle **101** comprises first and second non-uniform conformation  
portions **102**, **103** respectively, a third bottom portion **104** with a closed bottle  
bottom, and a top portion **105** with an open bottle top.

The first and second conformation portions **102**, **103** each have a  
10 non-uniform cross-section therethrough. For example, observing the change  
in cross-section perpendicular to centre-line **106** through bottle **101**, moving  
along centre-line **106** through each of the non-uniform conformation portions  
**102**, **103**; the shape of first conformation portion **102** is a substantially  
spherical bulge and the shape of second conformation portion **103** is  
15 substantially a truncated cone. The cross-section of first conformation portion  
**102** having the maximum radius is indicated by line **107**, and this indicates  
the radius of the spherical shape of this conformation portion **102**.

### ***Figure 2***

20 *Figure 2* shows a planar covering **201** for bottle **101**. Planar covering  
**201** comprises graphics **202**.

In this example, planar covering **201** is substantially rectangular and is  
arranged such that following application of the covering **201** to bottle **101**, the  
covering **201** is secured around the bottle **101** and is positioned over each of

the three portions **102**, **103**, **104** between the top and the bottom of the bottle **101**. In this example, graphics **202** are positioned on covering **201** such that following the application of covering **201** to bottle **101**, graphics **202** are substantially wrapped around first conformation portion **102**, following the conformation contour thereof. Graphics **202** are shown in further detail in *Figure 3*.

*Figure 3*

*Figure 3* shows graphics **202** in further detail. In the illustrated example, graphics **202** is arranged such that following the application of covering **201** to bottle **101**, graphics **202** applied to first conformation portion **102** represent a football having regular hexagonal and regular pentagonal football sections.

Graphics **202** comprises a plurality of hexagonal and pentagonal football section representations **301** arranged in a 2-Dimensional format. Due to the non-uniform cross-section of first conformation portion **102**, graphics **202** comprises graphics, for example graphics **302** in region **303**, in distorted proportion to compensate for the shape of the first conformation portion **102**. In this example, graphics **202** comprises football section representations, for example football section representation **304**, that have a non-regular shape, in this example non-regular hexagonal or pentagonal shape.

Planar covering **201** is arranged to be applied to bottle **101** such that the longitudinal centre-line **305** through graphics **202** is aligned with the line **107** indicating the radius of the substantially spherical bulge of first

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conformation portion 102. Thus, it can be seen from *Figure 3* that the football section representations 301 lying on centre-line 305 are regular in shape. Moving away from centre-line 305 in a direction perpendicular thereto, it can be seen that the greater the distance from the centre-line 305, the more irregular the shape of the football section representation 301. This corresponds to the increase in curvature of the first conformation portion 102 as the perpendicular distance from the circumferential line 107 increases.

#### *Figure 4*

10 *Figure 4* shows planar covering 201 applied to bottle 101. It can be seen that following the application of the covering 201 to the bottle 101, graphics 202 appear in normal proportion; taking into account normal perspective. For example, non-regular football section representation 304, appears in normal proportion following the application of covering 201 to

15 bottle 101.

In this example, the relative proportion of a football section representation having a 2-Dimensional irregular shape is adjusted during the application process, such that the football section representation in 3-Dimensional shape over the bottle appears regular. An application process in which a degree of regularity or irregularity of a shape is removed is utilisable.

20 A process utilisable as the application process is shrink-wrapping. A planar shrink-wrap container covering having graphics applied thereto, for example by a printing process, is utilisable to display 2-Dimensional graphics on a non-uniform 3-Dimensional container.

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Graphics of the type described herein, having graphics in distorted proportion, are arrangable on a planar covering to be applied to containers having alternative shapes of a non-uniform conformation portion, and such containers to which a planar covering is applied can be fabricated from plastic, aluminium or any other material.

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## Claims

1. A planar covering for a container comprising a conformation portion having a non-uniform cross-section therethrough, said planar covering comprising graphic representation in distorted proportion to compensate for the shape of said conformation portion, whereby said graphic representation appears in normal proportion following application of said planar covering to said conformation portion.

2. A container comprising a conformation portion having a non-uniform cross-section therethrough, and a planar covering for said container, said planar covering comprising graphic representation in distorted proportion to compensate for the shape of said conformation portion, whereby said graphic representation appears in normal proportion following application of said covering to said conformation portion.

3. A container according to claim 2, in which said shape is a substantially spherical bulge.

4. A method of applying graphics to a conformation portion of a container, said conformation portion having a non-uniform cross-section therethrough, said method comprising the steps of:

a) applying graphics in distorted proportion to a planar covering, and

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b) performing an application process in which said planar covering is applied to said conformation portion such that following said application process said graphics appear in normal proportion.

5           5.     A method according to claim 4 in which the relative proportions of said graphics are adjusted during said application process.

          6.     A method according to claim 4 or claim 5 in which said application process involves shrink-wrapping.

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          7.     A method according to any of claims 4 to 6 in which step a) comprises applying graphics to a planar covering such that said graphics are in distorted proportion to compensate for the shape of said conformation portion.

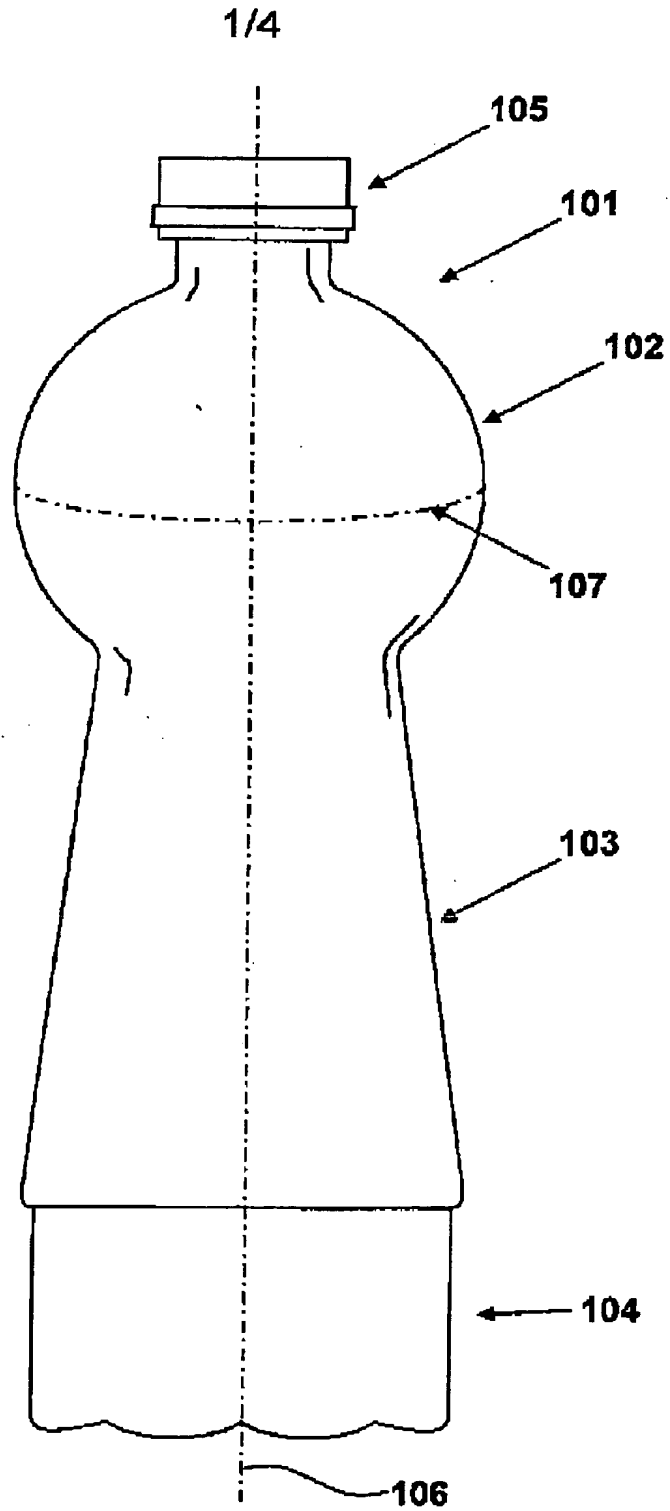
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          8.     A method according to any of claims 4 to 7 wherein said shape is a substantially spherical bulge.

          9.     A planar covering substantially as described herein with  
20 reference to *Figures 1 to 4*.

          10.    A method of displaying graphics on a non-uniform 3-Dimensional container substantially as described herein with reference to *Figures 1 to 4*.





*Figure 1*



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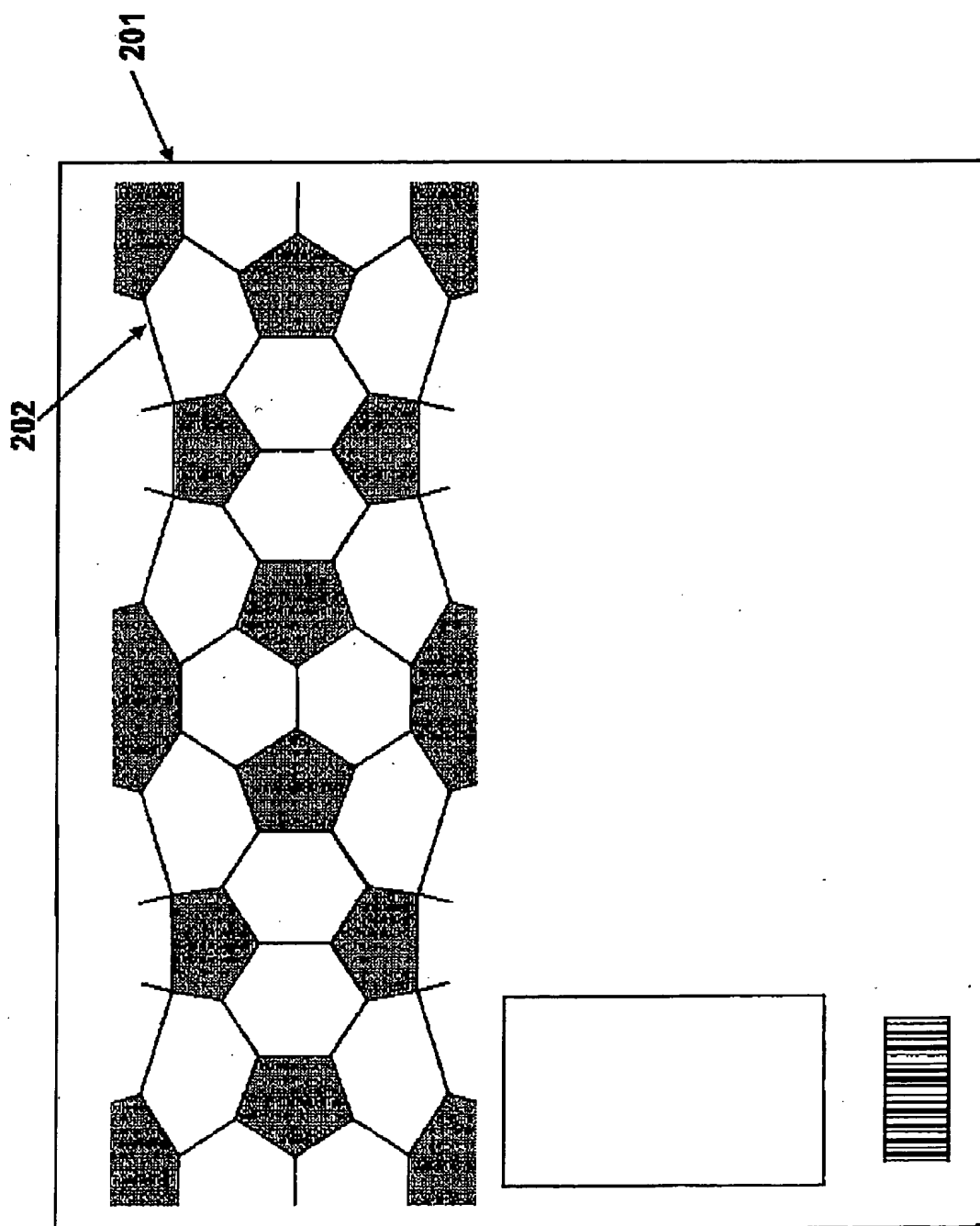
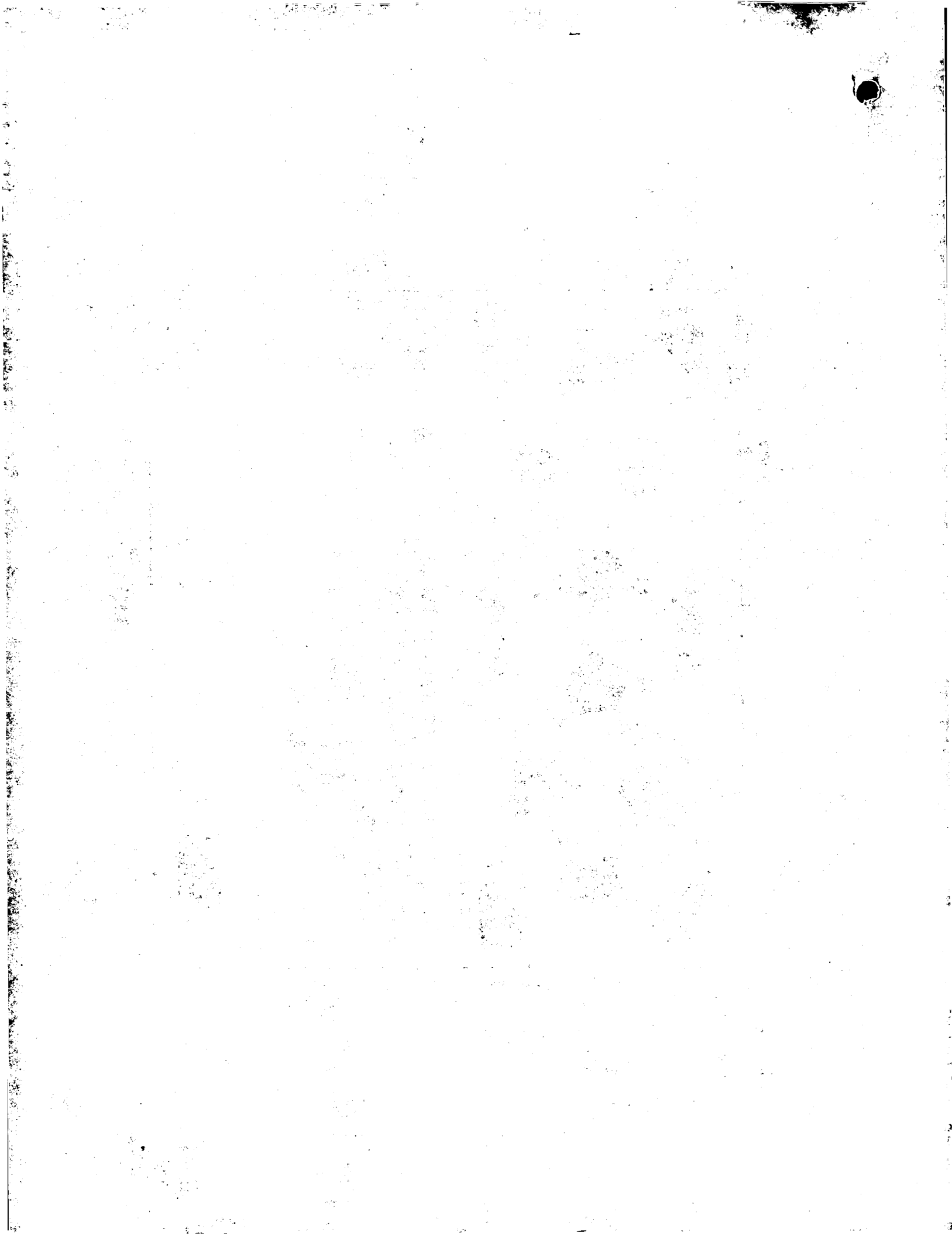
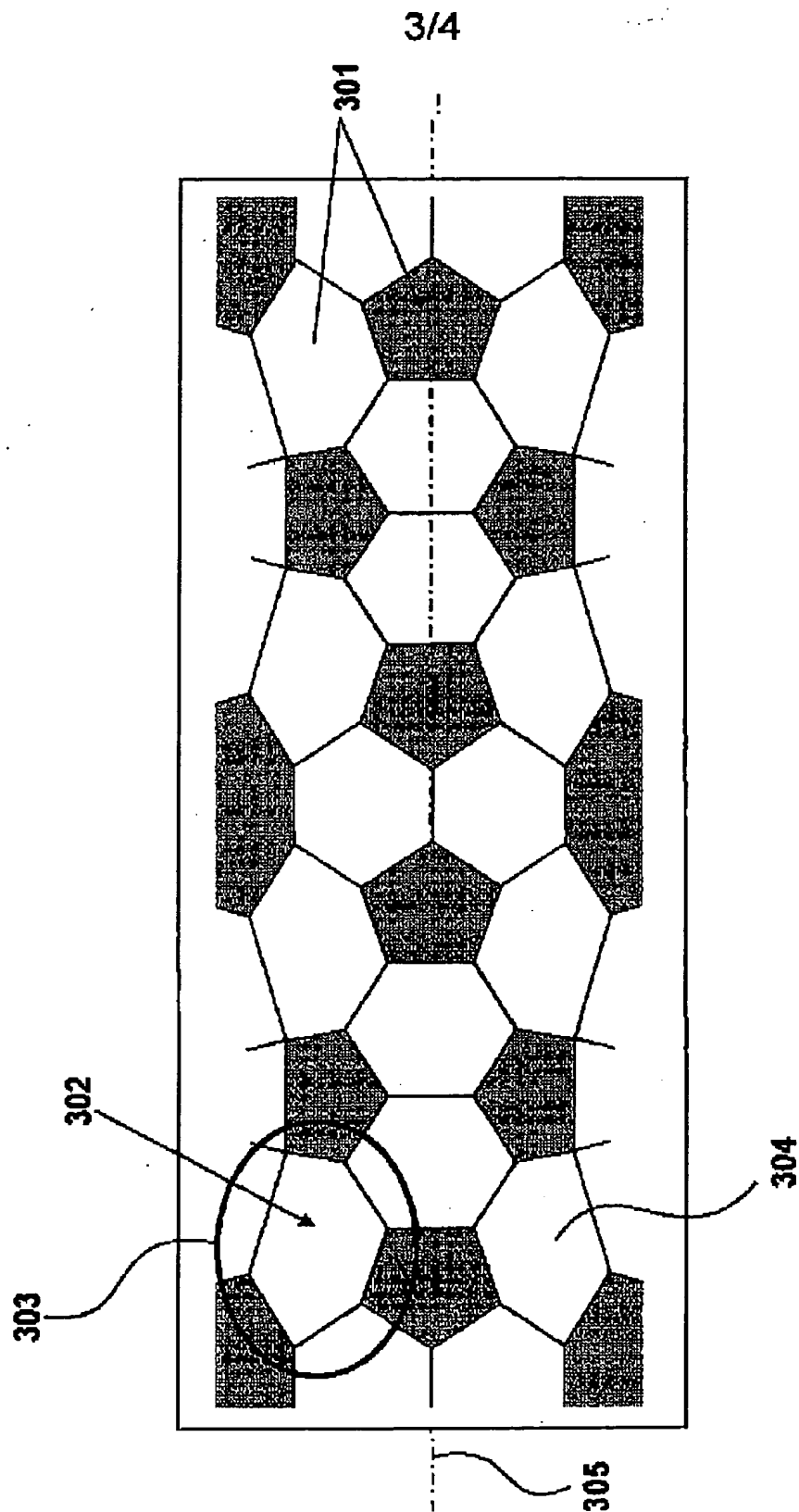


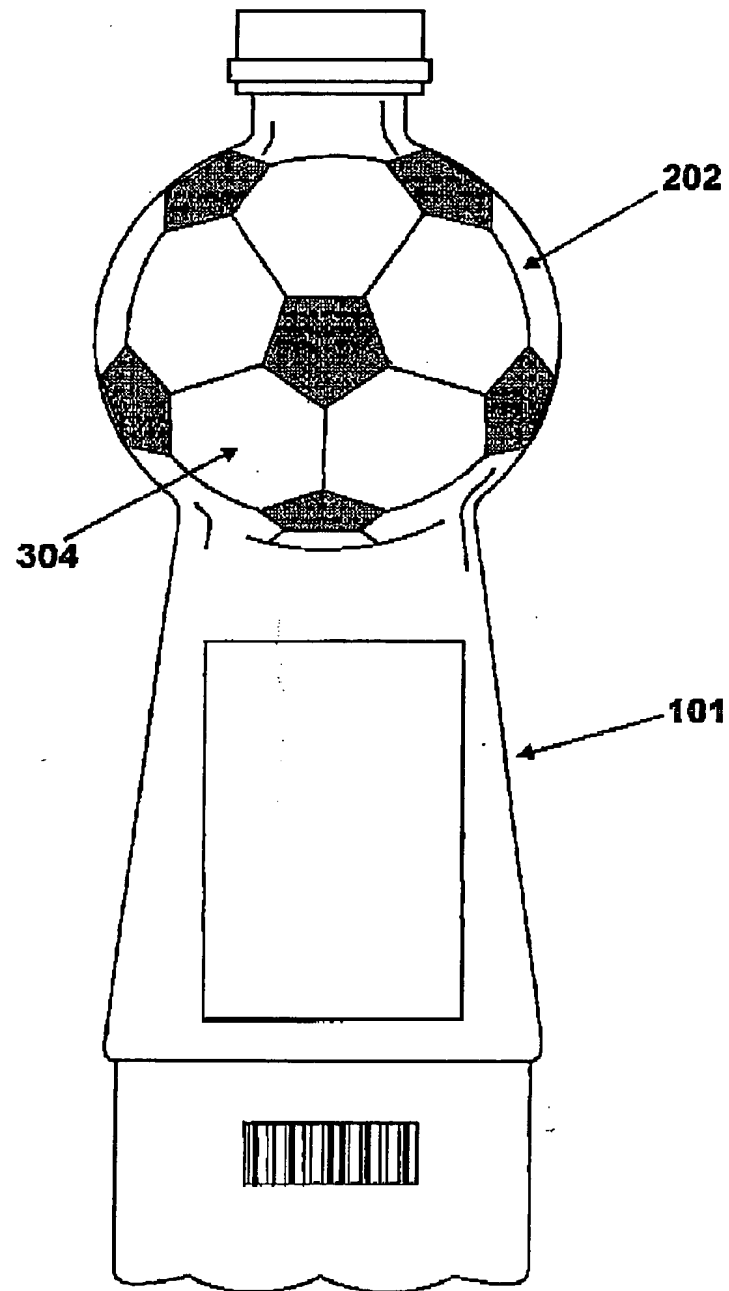
Figure 2



*Figure 3*



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*Figure 4*

